

# 1. Introduction and Overview

In this section the purpose, duties, and responsibilities of the Counterproliferation Program Review Committee (CPRC) are described along with its statutory annual reporting requirements. Key definitions of terms used in the report are provided, including a definition of the scope of the CPRC's activity and program review responsibilities. The multi-tiered response and operational objectives required to counter the proliferation of nuclear, biological, and chemical (NBC) weapons and their means of delivery, including NBC terrorist threats, are discussed to provide some background and context for the program descriptions that make up the bulk of the report. Finally, the new counterproliferation Areas for Capability Enhancements (ACEs), modified since the 1996 CPRC report, are described.

## 1.1 Description and Purpose of the CPRC

This report is the fourth annual report of the CPRC chartered by Congress to report on the activities and programs of the Department of Defense (which includes the Office of the Secretary of Defense (OSD) and the Joint Chiefs of Staff (JCS)), Department of Energy (DOE), and U.S. Intelligence related to enhancing U.S. capabilities to counter the proliferation of NBC weapons of mass destruction (WMD) and their means of delivery (NBC/M).

**1.1.1 The Counterproliferation Program Review Committee.** Section 1605 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 1994 (Public Law No. 103-160, 107 Stat. 1845, November 1993) established the Nonproliferation Program Review Committee (NPRC) and requested the Secretary of Defense to submit a report to Congress concerning nonproliferation activities of Executive Branch agencies. The NPRC issued its findings in a May 1994 Report to Congress entitled *Report on Nonproliferation and Counterproliferation Activities and Programs*. Congress modified the charter of the NPRC in Section 1502 of the FY 1995 NDAA (Public Law No. 103-337, 108 Stat. 2914, October 5, 1994), replacing the NPRC with the CPRC, and focusing its review responsibilities on nonproliferation and counterproliferation activities and programs of the DoD (which includes OSD and the Joint Staff), DOE, and U.S. Intelligence. The CPRC is chaired by the Secretary of Defense, and composed of the Secretary of Energy (as Vice Chairman), the Director of Central Intelligence (DCI), and the Chairman of the Joint Chiefs of Staff (CJCS). The CPRC's membership is indicative of the high level, interdepartmental response necessary to achieve national nonproliferation and counterproliferation policy and strategy objectives to counter the proliferation of NBC/M.

**New Developments.** Over the past year, several organizational changes have occurred in the CPRC. In the 1997 NDAA (Section 1309 of Public Law No. 104-210, 110 Stat. 2710, 1996), Congress extended the authority of the CPRC until the year 2000 and designated the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs (ATSD(NCB)) as the Executive Secretary of the CPRC. It also amended the purposes of the CPRC to include ensuring the development and fielding of technologies and capabilities "*to negate paramilitary and terrorist threats involving weapons of mass destruction*". In recognition of this recent amendment to the CPRC's authority, additional attention will be given in this report to DoD,

DOE, and U.S. Intelligence research and development (R&D) and acquisition activities and programs assisting in efforts to counter paramilitary and terrorist NBC threats.

In other developments, the Secretary of Defense designated, consistent with the CPRC's charter, the Deputy Secretary of Defense to perform the duties of CPRC Chairman, replacing the Under Secretary of Defense for Acquisition and Technology (USD(A&T)), who had served in this capacity during the last two years. This action served to equalize the level of representation of CPRC principals among the CPRC-represented organizations, particularly as regards DoD, where the Deputy Secretary chairs DoD's internal Counterproliferation Council (see subsection 5.1.1). The CPRC also established a Standing Committee to take a more proactive approach to fulfilling its responsibilities under the law. The CPRC Standing Committee meets regularly and is actively working to perform the duties and implement the recommendations of the CPRC. The Standing Committee is composed of the ATSD(NCB) (as Chairman); the Director, Office of Nonproliferation and National Security, DOE (as Vice Chairman); the Special Assistant to the DCI for Nonproliferation; the Deputy Director for Strategy and Policy, Joint Chiefs of Staff (Plans and Policy, J-5); and, in recognition of the new statutory role of the CPRC in counterterrorism activities, the Assistant Secretary of Defense for Special Operations/Low-Intensity Conflict (ASD(SO/LIC)).

***Duties and Responsibilities.*** The CPRC is directed by Congress to: i) identify and review existing and proposed capabilities and technologies for supporting U.S. counterproliferation policy and efforts, including efforts to stem the proliferation of NBC/M and negate paramilitary and terrorist NBC threats; ii) prescribe requirements and priorities for the development and deployment of effective capabilities and technologies; iii) identify deficiencies in existing capabilities and technologies; iv) formulate near-term, mid-term, and long-term programmatic options for meeting identified requirements and eliminating deficiencies; v) establish priorities for programs and optimize funding for capability and technology development; vi) identify and eliminate undesirable redundancies or uncoordinated efforts in the development of such technologies and capabilities; vii) encourage and facilitate interagency and interdepartmental funding of programs; viii) ensure integration of DOE programs into the operational needs of DoD and U.S. Intelligence through technology demonstrations and prototype development; and ix) annually assess committee actions and the status of committee recommendations and report their findings to Congress. The CPRC submits an annual report to Congress on May 1<sup>st</sup> of each year detailing its findings and recommendations. These reports, previously published in May of 1995 and 1996, were both entitled: *Report on Activities and Programs for Countering Proliferation*. (The first NPRC report was published in May 1994.) Excerpts of the 1994, 1995, and 1997 NDAA's establishing and defining the authority and responsibilities of the CPRC are provided in Appendix A.

**1.1.2 CPRC Annual Reporting Requirements.** Congress directed the Secretary of Defense to submit to Congress, not later than May 1<sup>st</sup> of each year, a report of the findings of the CPRC. Congress specified that the report contain the following information: i) a complete list, by specific program element, of the existing, planned, or newly proposed capabilities and technologies reviewed by the CPRC; ii) a complete description of the requirements and priorities established by the CPRC; iii) a comprehensive discussion of the near-term, mid-term, and long-term programmatic options formulated by the CPRC for meeting the CPRC's requirements and for eliminating identified deficiencies, including the annual funding requirements and completion dates established

for each such option; iv) an explanation of the recommendations made by the CPRC, together with a full discussion of the actions taken to implement them; v) a discussion and assessment of the status of each CPRC recommendation during the fiscal year preceding the fiscal year in which the report is submitted; vi) identification of each specific DOE program that the Secretary of Energy plans to develop to initial operating capability (IOC) and each such program that the Secretary does not plan to develop to IOC; and vii) for each new technology program scheduled to reach operational capability, a recommendation from the CJCS that represents the views of the Commanders-in-Chief (CINCs) of the unified and specified commands regarding the utility and requirement of the program. This report is in response to that request.

**1.1.3 Definitions.** In this report, proliferation refers to the spread of nuclear, biological, and chemical weapons and their means of delivery (denoted “NBC/M”) – commonly referred to as weapons of mass destruction (i.e., “WMD”). There is still no universal and consistent use of terms to designate these weapons either within or among the CPRC-represented organizations. The CPRC itself is in a period of transition regarding a consistent use of terminology to describe NBC weapons and their means of delivery. However, in this report the term “NBC/M”, defined above, will generally be used because of its greater specificity (compared to the term “WMD”) and because it serves to emphasize the important distinctions that exist between nuclear, biological, and chemical weapons, and in the corresponding means required to counter them. Nevertheless, the term “WMD” is still used occasionally in the report, particularly when referring to counterproliferation- and counterterrorism-related policy and strategy objectives (where the term has been frequently used) and to previous activities of the CPRC. It should also be noted that the term “nuclear weapons” is meant to include radiological weapons as well as the more familiar large energy yield nuclear weapons.

In addition to countering NBC/M, this report also deals with the technologies and capabilities to defeat the infrastructure elements required to support the production, storage, and deployment of NBC weapons and their delivery systems, in particular ballistic and cruise missiles. Technologies and capabilities to negate paramilitary and terrorist NBC threats are also addressed. The report focuses on existing and emerging proliferant states, but also considers the proliferation of NBC/M from China, the states of the former Soviet Union (FSU), and Third World nations.

DoD, DOE, and U.S. Intelligence (i.e., the “intelligence community”) are responsible for a wide variety of tasks to prevent, deter, and counteract NBC/M proliferation and NBC terrorism. The specific responsibilities of DoD, referred to as “counterproliferation” and “combating terrorism” (which includes “counterterrorism” and “anti-terrorism”), span the spectrum from military operations and warfighting to supporting diplomatic efforts and include supporting proliferation prevention and intelligence activities, implementing and verifying arms control treaties, deterring the use of NBC weapons, defending against NBC/M, operating effectively in the presence of NBC/M, and maintaining a robust capability to find and destroy NBC weapon delivery forces and their supporting infrastructure elements with minimal collateral effects, should this become necessary. DoD’s role in combating terrorism includes: protecting U.S. forces from paramilitary and terrorist threats (generally referred to as “anti-terrorism”); supporting interagency counterterrorism activities; working with federal, state, and local authorities to support “First Responder” emergency response teams (i.e., those first on the scene); and providing consequence management assistance in incidents involving NBC weapons. DOE’s “nonproliferation”

responsibilities include activities and programs in nuclear proliferation prevention, intelligence support, treaty verification, and technology development to support these responsibilities. DOE's extensive expertise in the chemical and biological sciences is also being leveraged to improve passive defenses against chemical and biological weapons (CW/BW). DOE's counterterrorism role includes supporting the Nuclear Emergency Search Team (NEST), responsible for detecting and rendering safe nuclear weapons and devices and providing consequence management of nuclear incidents. Components of both DoD and DOE provide valuable assistance supporting the lead role of the Federal Bureau of Investigation (FBI) in handling NBC counterterrorism activities in the U.S. The activities and programs of U.S. Intelligence for "countering proliferation" summarized in this report and in the companion "Intelligence Annex" (separately bound), address the broader intelligence efforts necessary to prevent, detect, and react to the proliferation of NBC/M and NBC terrorism.

**1.1.4 Scope of Programs Reviewed by the CPRC.** The CPRC reviews those DoD, DOE, and U.S. Intelligence programs "strongly related to countering proliferation." The CPRC defines programs strongly related to countering proliferation as those R&D, acquisition (including procurement), and Operational and Maintenance (O&M) programs: i) established and implemented in response to and consistent with NPRC/CPRC recommendations and which, if eliminated, would necessitate significant modification of the CPRC-endorsed initiatives to achieve the recommended improvements in capabilities outlined in previous NPRC/CPRC reports to Congress; and ii) other programs strongly related to countering proliferation which directly address the counterproliferation ACE priorities. In general, existing and ongoing DoD, DOE, and U.S. Intelligence programs strongly related to countering proliferation include those R&D, acquisition, and selected O&M programs that are directly related to the counterproliferation ACEs and that support the counterproliferation functional areas and the operational objectives for countering NBC/M proliferation and NBC terrorism defined in Section 1.2 below.

It should be noted that general purpose defense and defense infrastructure programs, such as acquisition programs for the various military weapon delivery platforms, are not considered to be strongly related to counterproliferation because they contribute to the basic capabilities of U.S. forces which underlie all military capabilities, not just those associated with countering NBC/M proliferation and NBC terrorist threats. Military construction programs are not considered for similar reasons – many of them underlie other military capabilities. Likewise, U.S. nuclear forces are also not included in the CPRC's review because of their fundamental role in ensuring the basic deterrence strategy of the United States. Such acquisition programs would still continue largely unaffected should NBC/M proliferation threats suddenly disappear.

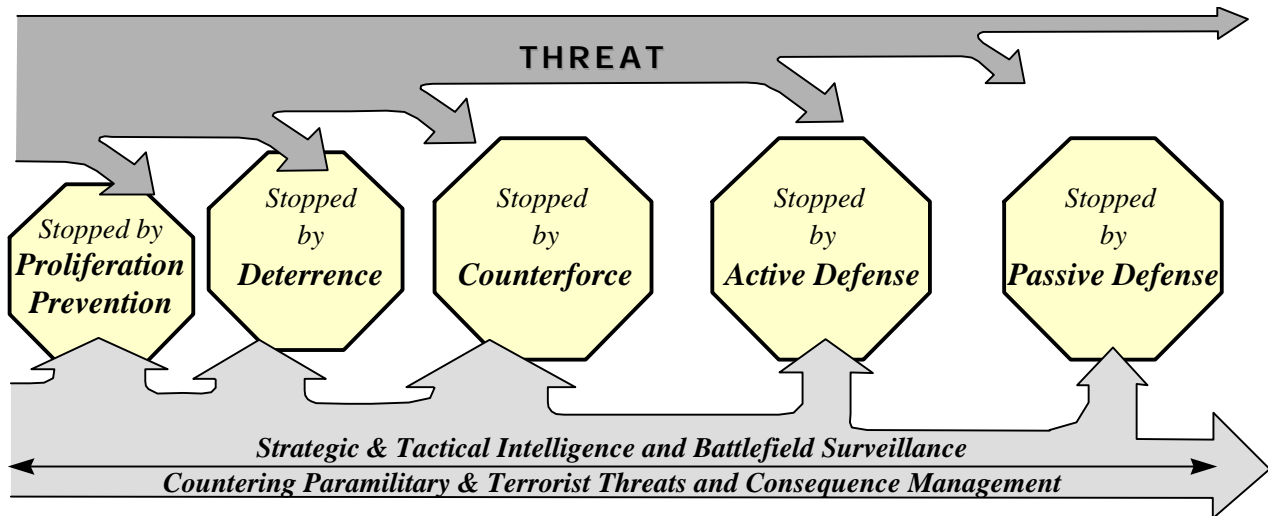
In general, CPRC-endorsed initiatives leverage and augment existing and ongoing programs in order to accelerate program deliverables. DoD's Counterproliferation Support Program, established in direct response to a 1994 NPRC recommendation, is one example of a continuing CPRC initiative designed to accelerate the fielding of enhanced capabilities and technologies emerging from ongoing DoD R&D and acquisition programs. The Advanced Concept Technology Demonstration (ACTD) is the primary acquisition vehicle used to achieve rapid evaluation and fielding of new capabilities to the CINCs. For example, one of the areas of most concern to the CPRC has been the lack of deployed capabilities to detect, identify, and provide timely warning of a BW attack. In response, DoD's Chemical and Biological Defense Program and the Joint Program

Office for Biological Defense (JPO-BD) are conducting the Air Base/Port Bio Detection ACTD to improve BW detection and warning at air bases, ports, and other fixed facilities. The Counterproliferation Support Program is conducting, in conjunction with the JPO-BD and the Chemical and Biological Defense Program, the Joint Biological Remote Early Warning System (JBREWS) ACTD to accelerate the deployment of critical BW detection and early warning systems. It is also initiating the development, in conjunction with JPO-BD, the Army, and the Marine Corps, of a Consequence Management “911-BIO” ACTD to improve the emergency response to terrorist incidents involving BW threats. DOE is also participating in these ACTDs. In another area of significant concern to the CPRC, the Counterproliferation Support Program is continuing the accelerated development of a new generation of hardened and underground NBC/M target defeat and collateral effects prediction and mitigation capabilities that are being demonstrated as part of the ongoing Counterproliferation ACTD.

## **1.2 The Multi-Tiered Response to Countering Proliferation**

**1.2.1 Key Counterproliferation Functional Areas.** Considering the complexities of facing an adversary armed with NBC/M, the CPRC places a high priority on proliferation prevention. Realizing, however, that efforts to halt the proliferation of NBC/M may not always be entirely successful, DoD must prepare U.S. forces to fight, survive, and prevail in any conflict involving the use of NBC weapons by an adversary. The CPRC-represented organizations have developed a multi-tiered response to counter NBC/M threats that seeks to devalue their perceived utility and, consequently, to make their acquisition unattractive to a would-be proliferant, while at the same time assuring that U.S. forces can prevail in any conflict involving adversarial use of these weapons. These underpinnings of deterrence are achieved by aggressively pursuing capability improvements in the following seven key counterproliferation functional areas, illustrated in Figure 1.1 and defined below.

- ***Proliferation Prevention*** – to deny attempts by would-be proliferants to acquire or expand their NBC/M capabilities by: providing inspection, monitoring, verification, and enforcement support for nonproliferation treaties and NBC/M arms control regimes; supporting export control activities; assisting in the identification of potential proliferants before they can acquire or expand their NBC/M capabilities; and, if so directed by the National Command Authority, planning and conducting interdiction operations;
- ***Strategic and Tactical Intelligence*** – to provide to policy and operational organizations actionable foreign intelligence on the identity and characterization of activities of existing or emerging proliferant states and groups in order to support U.S. efforts to prevent the acquisition of NBC/M weapons and technology, cap or roll back existing programs, deter weapons use, and adapt military forces and emergency assets to respond to these threats;
- ***Battlefield Surveillance*** – to detect, identify, and characterize enemy NBC/M forces and associated infrastructure elements (using DoD and intelligence assets) in a timely manner



**Figure 1.1 Countering Proliferation: A Multi-Tiered Approach**

to support combat operations, such as targeting and mission/strike planning activities, and provide timely post-strike battle damage assessment (BDA);

- **Counterforce** – to target (using battlefield surveillance and other intelligence assets), plan attacks, deny, interdict or destroy, and rapidly plan and conduct restrikes as necessary against hostile NBC/M forces and their supporting infrastructure elements while minimizing collateral effects;
- **Active Defense** – to protect U.S., allied and coalition forces, and noncombatants by intercepting and destroying or neutralizing NBC weapons delivered by ballistic and cruise missiles and aircraft, while minimizing collateral effects that might arise during all phases of intercept;
- **Passive Defense** – to protect U.S., allied, and coalition forces against NBC weapons effects associated with NBC/M use, including measures to detect and identify NBC agents, individual and collective protection equipment for combat use, NBC medical response, vaccines for BW defense, and NBC decontamination technologies; and
- **Countering Paramilitary, Covert Delivery, and Terrorist NBC Threats** – to protect military and civilian personnel, facilities, and logistical/mobilization nodes from this special class of NBC threats and manage the consequences of these threats both in the U.S. and abroad.

The activity and program descriptions provided in Sections 5 - 8 are generally organized with respect to these functional areas.

**1.2.2 Operational Objectives.** To meet mission objectives for countering proliferation and ensure that related interdepartmental R&D and acquisition programs lead to deployed capabilities

that satisfy the requirements of the combatant CINCs, key operational objectives have been identified by the CPRC and are listed in Table 1.1 for each counterproliferation functional area. When shortfalls are identified, CPRC-endorsed initiatives will be established to improve U.S. capabilities in a timely manner by accelerating the fielding of technologies and capabilities that satisfy the operational requirements of the CINCs and other U.S. Government organizations.

### 1.3 The New Counterproliferation ACEs for 1997

***Evolution of the Counterproliferation ACEs.*** The ACEs were first defined by the CPRC in their 1995 report to Congress. They were developed by combining the NPRC's "Areas for Progress" with the Joint Staff and CINC prioritized counterproliferation capabilities established by the Deterrence/Counterproliferation Joint Warfighting Capabilities Assessment (JWCA) team. The ACEs were established to characterize those areas where progress is needed to enhance both the warfighting capabilities of the CINCs and the overall ability to satisfy the demands of U.S. nonproliferation and counterproliferation policy. The prioritization of the ACEs has generally

**Table 1.1: Operational Objectives for Countering Proliferation**

<b>Counterproliferation Functional Area</b>	<b>Objectives</b>
<ul style="list-style-type: none"> <li>• Proliferation Prevention</li> </ul>	<ul style="list-style-type: none"> <li>• Effective and Cooperative Interagency Support in Export Controls, Treaty Verification, and Inspection Support</li> <li>• Detection, Tracking, and Protection of NBC/M Associated Materials, Components, and Technologies</li> <li>• Effective and Timely Data Correlation and Fusion</li> </ul>
<ul style="list-style-type: none"> <li>• Strategic and Tactical Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>• Provide Accurate, Comprehensive, Timely, and Actionable Foreign Intelligence in Support of National Strategy for Countering Proliferation</li> <li>• Effective/Timely Dissemination of Operational Intelligence to Users</li> </ul>
<ul style="list-style-type: none"> <li>• Battlefield Surveillance</li> </ul>	<ul style="list-style-type: none"> <li>• Accurate NBC/M Target Identification and Characterization</li> <li>• Time Urgent Response</li> <li>• Prompt, Reliable Post-Strike Damage Assessment and BDA</li> </ul>
<ul style="list-style-type: none"> <li>• NBC/M Counterforce</li> </ul>	<ul style="list-style-type: none"> <li>• High Kill/Neutralization Probability against Hardened, Underground, and Mobile NBC/M Targets</li> <li>• Collateral Effects Characterization, Minimization, and Neutralization</li> <li>• Time Urgent Response</li> <li>• Prompt Targeting and Strike/Restrike Planning</li> </ul>
<ul style="list-style-type: none"> <li>• Active Defense</li> </ul>	<ul style="list-style-type: none"> <li>• Cost-Effective, Wide Area, Low Leakage Active Air and Missile Defenses</li> <li>• Collateral Effects Minimization/Neutralization</li> </ul>
<ul style="list-style-type: none"> <li>• Passive Defense</li> </ul>	<ul style="list-style-type: none"> <li>• Prompt, Accurate NBC Agent Detection, Identification, and Early Warning</li> <li>• Individual and Collective Protection, Decontamination, Medical Response, and Post Exposure Therapies that Minimize Casualties, Performance Degradation, and Operational and Logistical Impacts</li> <li>• Availability of Effective BW Vaccines</li> </ul>
<ul style="list-style-type: none"> <li>• Countering Paramilitary, Covert Delivery, and Terrorist NBC Threats</li> </ul>	<ul style="list-style-type: none"> <li>• Joint Interagency Readiness against NBC Threats in the U.S. and Overseas</li> <li>• Prompt, Effective World-Wide Response</li> <li>• Timely and Effective Consequence Management</li> </ul>

followed the prioritization of the CINCs' required counterproliferation capabilities. The May 1996 CPRC report to Congress characterized the ACEs as "defin[ing] those priority areas where additional capabilities are required to meet the challenges posed by WMD proliferation threats. They prioritize the counterproliferation-related responses to interdepartmental policy needs and, in particular, reflect the operational requirements of the Unified Commands for countering proliferation." The ACEs serve a variety of purposes including: "guid[ing] the CPRC's program review process"; providing "a unified basis for reviewing and assessing future progress in meeting counterproliferation and related nonproliferation mission needs" of the CPRC-represented organizations; providing broad guidelines for R&D and acquisition program investments; and defining programs that are "strongly related to countering proliferation", which are those programs that address, or are directly related to, the ACE priorities.

Last year, the CPRC recommended that the ACEs be reviewed and reprioritized as necessary in order to "ensure that they continue to reflect the integration of CINC warfighting priorities and the overarching national security objectives they support." The CPRC was confident that this ACE reprioritization would "serve to improve the focus of future programmatic and managerial efforts to counter the threat of WMD proliferation." The review and reprioritization of the ACEs was completed under the auspices of the CPRC Standing Committee. The Standing Committee decided that this year each CPRC-represented organization would prioritize the ACEs in accordance with their own departmental missions to more accurately reflect each organization's response to countering proliferation. Table 1.2 lists the new counterproliferation ACEs for 1997 and includes the prioritizations of each CPRC-represented organization.

***Summary of the CPRC's ACE Review.*** The CPRC directed the CPRC Action Officers, under the auspices of the CPRC Standing Committee, to review the ACEs and recommend modifications for CPRC consideration. The Action Officers relied on several sources of information to support their review, including: i) the "Prioritized CINC Staff Counterproliferation Required Capabilities" developed during Operational Planning Workshops conducted by the Joint Staff with each of the CINCs (see subsection 5.1.2); ii) results of studies and analyses conducted in support of budget development processes of the CPRC-represented organizations, including the 1996 Counterproliferation Study (see subsection 5.1.3); and iii) growing government-wide concerns about the potential for NBC terrorist threats. Represented organizations included: each of the Services, the Joint Staff, Office of the Secretary of Defense (ATSD(NCB), ASD(SO/LIC), ASD(International Security Policy), and ASD(Command, Control, Communications and Intelligence)), DoD Agencies, DOE, U.S. Intelligence, the National Security Council (NSC), and the Office of Management and Budget (OMB). The CPRC Standing Committee members and Action Officers participating in the ACE review are listed in Appendix B.

Table 1.3 summarizes the ACE modifications approved by the CPRC Standing Committee acting on behalf of the CPRC. The side-by-side comparison is ordered using the DoD prioritization of the ACEs. The key changes made in the ACEs since last year's report are summarized below.

***Increased Priority of Countering Paramilitary and Terrorist NBC Threats.*** The ACEs dealing with support for Special Operations Forces (SOF) and defending against paramilitary and



**Table 1.2: New ACEs and ACE Priorities of the CPRC-Represented Organizations**

<b>ACE Priorities</b>			<b>Areas for Capability Enhancements (ACEs)</b>
<b>DoD*</b>	<b>DOE</b>	<b>US INTELL</b>	
1	3	1	Detection, Identification, and Characterization of BW Agents
2	6	3	Detection, Characterization, and Defeat of NBC/M Facilities with Minimal Collateral Effects
3	8	4	Detection, Characterization, and Defeat of Underground Facilities with Minimal Collateral Effects
4	-	2	Theater Ballistic Missile Active Defense**
5	2	5	Support for Special Operations Forces and Defense Against Paramilitary, Covert Delivery, and Terrorist NBC Threats
6	4	6	Provide Consequence Management
7	-	7	Cruise Missile Defense
8	7	8	Collection, Analysis, and Dissemination of Actionable Intelligence to Counter Proliferation
9	-	13	Robust Passive Defense to Enable Sustained Operations on the NBC Battlefield
10	-	9	BW Vaccine RDT&E and Production to Ensure Stockpile Availability
11	-	14	Target Planning for NBC/M Targets
12	-	11	Prompt Mobile Target Detection and Defeat
13	1	15	Detection, Tracking, and Protection of NBC/M and NBC/M-Related Materials and Components
14	9	12	Support Export Control Activities of the U.S. Government
15	5	10	Support Inspection and Monitoring Activities of Arms Control Agreements and Regimes

\* includes both the OSD and JCS

\*\* National Missile Defense is associated with this ACE. (See discussion in Section 2.2.)

terrorist NBC threats (old ACEs #12 and #13, respectively) were raised in priority and combined. While there was concern that combining these ACEs might have a diluting effect on the perceived range of SOF roles in countering proliferation (e.g., in intelligence collection), both the increased priority and the combining of these ACEs are consistent with the CINCs' counterproliferation required capabilities (see Table 5.1). The importance of managing the consequences of an incident involving NBC weapons effects, i.e., "Consequence Management", was also recognized by the CPRC as a critical capability shortfall and led to the creation of a new ACE.

**Table 1.3: Summary of ACE Modifications**

Old ACEs (1996)	Correspondence	Revised ACEs (in DoD Priority Order)
1. Detection, Identification, and Characterization of BW/CW Agents	→ ●	1. Detection, Identification, and Characterization of BW Agents
2. Cruise Missile Defense	→	2. <i>Detection, Characterization, and Defeat of NBC/M Facilities with Minimal Collateral Effects*</i>
3. Theater Ballistic Missile Defense	→	3. <i>Detection, Characterization, and Defeat of Underground Facilities with Minimal Collateral Effects*</i>
4. Detection, Characterization, and Defeat of Underground WMD Facilities	→ ●	4. Theater Ballistic Missile Active Defense
5. Collection, Analysis, and Dissemination of Actionable Intelligence <i>to the Warfighter</i>	→ ●	5. Support for Special Operations Forces and Defense Against Paramilitary, Covert Delivery, and Terrorist NBC Threats
6. Robust Passive Defense to Enable Continued Operations on the NBC Battlefield	→	6. <i>Provide Consequence Management*</i>
7. BW Vaccine RDT&E and Production to Ensure Availability	→	7. Cruise Missile Defense
8. Target Planning for WMD Targets	→ ●	8. Collection, Analysis, and Dissemination of Actionable Intelligence <i>to Counter Proliferation</i>
9. BW/CW Agent Defeat	→ ●	9. Robust Passive Defense to Enable Sustained Operations on the NBC Battlefield
10. Detection and Tracking of WMD and WMD-Related Shipments	→ ●	10. BW Vaccine RDT&E and Production to Ensure <i>Stockpile</i> Availability
11. Prompt Mobile Target Detection and Defeat	→ ●	11. Target Planning for NBC/M Targets
12. Support for Special Operations Forces	→	12. Prompt Mobile Target Detection and Defeat
13. Defend Against Paramilitary, Covert Delivery, and Terrorist WMD Threats	→ ●	13. Detection, Tracking, and <i>Protection</i> of NBC/M and NBC/M-Related Materials and Components
14. Support Export Control Activities of the U.S. Government	→	14. Support Export Control Activities of the U.S. Government
15. Support Inspection and Monitoring Activities of Verifiable Arms Control Agreements and Regimes	→ ●	15. Support Inspection and Monitoring Activities of Arms Control Agreements and Regimes

\* *New ACE for 1997*

● - Denotes Clarification/Wording Change (in italics)

*Increased Priority of Countering NBC/M and Underground Targets.* Two new ACEs were defined (based on old ACE #4) to clarify the importance of correcting shortfalls in the detection, characterization, and defeat of *both* NBC/M facilities *and* underground facilities. These two new ACEs were also increased in priority. Detection and characterization of underground targets, whether NBC/M-related or not, are real concerns for U.S. Intelligence, further warranting a high priority ACE. Defeat of NBC/M facilities is given a higher priority over general underground facility defeat (by all CPRC-represented organizations) to reflect the focus of the counterproliferation community on countering NBC weapons. These ACEs were also modified to underscore the importance of minimizing collateral effects when attacking both NBC/M and non-NBC/M facilities. With the addition of the phrase “with Minimal Collateral Effects”, it was considered redundant to retain the “BW/CW Agent Defeat” ACE (old ACE #9), which was subsumed into the new DoD ACE priority #2.

*Focus on Biological Warfare Agent Detection.* ACE priority #1 was modified to focus solely on BW agents and, thereby, more accurately represent the critical shortfalls in BW agent detection, identification, and characterization. CW agent detection and identification remain critical to maintaining a robust passive defense (DoD ACE priority #9).

*Broadening the NBC/M Detection and Tracking ACE.* Old ACE #10 was clarified and broadened to include “Protection” of “NBC/M and NBC/M-Related *Materials and Components*”, and no longer refers solely to “Shipments”. Stated this way, the ACE now more accurately encompasses the activities of DOE’s Material Protection, Control, and Accounting Program designed to protect critical nuclear materials in FSU states. (See subsection 6.3.4.) The revised wording is also more representative of the functions of DoD’s Cooperative Threat Reduction Program and the activities of the Defense Technology Security Administration. (See Section 5.2).

*Clarifications and Wording Changes.* The term “WMD” was replaced with “NBC/M” or “NBC” (as appropriate) in new ACEs 2, 5, 11, and 13 for consistency and to add more specificity to these ACEs. Clarifications and/or wording changes were also made in five other ACEs. Old ACE #3 was clarified to read “Theater Ballistic Missile *Active* Defense” to more accurately specify its intended meaning of *in flight intercept* of theater ballistic missiles. Old ACE #5 was modified by replacing “Collection, Analysis, and Dissemination of Actionable Intelligence *to the Warfighter*” with “. . . *to Counter Proliferation*”, which more accurately reflects the broader counterproliferation-related mission of U.S. Intelligence. Old ACE #7, was clarified to ensure BW vaccine “*Stockpile Availability*”. Old ACE #15, dealing with support for arms control treaties, was modified by deleting the adjective “verifiable”, in order to broaden the scope of supportable arms control agreements. A minor clarification in old ACE #6 was also made, replacing “Continued Operations” with “*Sustained Operations*”.

## **1.4 Organization of the Report**

The remainder of the report is organized as follows. Section 2 reviews the findings and recommendations of the CPRC made in last year’s report and summarizes the CPRC’s approach for reviewing and assessing future progress in activities and programs related to countering proliferation and NBC terrorism. Section 3 provides an updated overview of worldwide NBC/M

proliferation and NBC terrorist threats, and Section 4 summarizes national and departmental policy perspectives and implementation strategies for dealing with these threats. Section 5 provides detailed descriptions of DoD activities and programs which are strongly related to counterproliferation and that directly address the counterproliferation ACEs. Program accomplishments, new initiatives, key milestones, and other new developments achieved since the 1996 CPRC report was issued are highlighted. DOE nonproliferation programs related to countering proliferation, including new initiatives and accomplishments, are discussed in Section 6. U.S. Intelligence programs and activities to counter proliferation are briefly described in Section 7, with the details provided in the separately bound "Intelligence Annex" to this report. The integrated DoD, DOE, and U.S. Intelligence responses to field improved capabilities and technologies to counter NBC paramilitary and terrorist threats are reviewed together in a separate section, Section 8, in recognition of recent Congressional action specifically enumerating CPRC responsibilities in this area. The findings and recommendations of the CPRC are provided in Section 9, which summarizes the integrated interdepartmental response for countering NBC/M proliferation and NBC terrorism.

Five appendices are also included in the report: Appendix A provides excerpts of the statutes which define the scope and responsibilities of the CPRC; Appendix B lists the CPRC program review participants; Appendix C provides tabular summaries of DoD activities and programs strongly related to countering NBC/M proliferation and terrorist NBC threats, including key program accomplishments, milestones, and budget profiles for FY 1998; Appendix D provides DOE's FY 1998 budget profile for its nonproliferation activities and programs strongly related to countering proliferation; and an acronym list is provided in Appendix E. Finally, a separately bound Intelligence Annex has been prepared by U.S. Intelligence to describe joint U.S. Intelligence, DoD, and DOE intelligence programs related to countering proliferation.